

Federal Fiscal Policy Since the Employment Act of 1946

Keith M. Carlson

THE Employment Act of 1946 assigned to the federal government the official responsibility to achieve and maintain a high level of employment.¹ According to the act:

The Congress hereby declares that it is the continuing policy and responsibility of the Federal Government to use all practicable means ... to promote maximum employment, production, and purchasing power.²

While the act does not specify how to achieve these goals, monetary and fiscal policy over the past 40 years have evolved into the primary tools of stabilization policy.

The general purpose of this article is to summarize fiscal policy since the Employment Act of 1946. The meaning and significance of fiscal policy are discussed, including some measurement problems associated with fiscal actions. Different measures of fiscal action during periods when the pace of economic activity was significantly above or below trend are examined to determine whether the direction of fiscal actions generally has been consistent with the Employment Act.

THE MEANING OF FISCAL POLICY

Fiscal policy is the use of federal expenditures and taxes to stabilize the economy. Two aspects of this definition require clarification. First, for the most part,

the government does not control directly the dollar amount of expenditures or taxes; instead it controls specific programs and the structure of tax rates. Second, to evaluate fiscal policy, a more specific definition of "economic stabilization" is required.

Defining Fiscal Action

Though Congress is originally responsible for establishing various expenditure programs — indeed, it must appropriate funds each year to keep a program in place — the dollar cost of implementing and maintaining such programs depends on economic conditions, including movements in the general level of prices. Similarly, though Congress legislates tax rates, the performance of the economy in conjunction with these rates determines the dollar amount of tax receipts. Once a tax structure is established, receipts are forthcoming in a particular year without any further action by the government.

The 1962 Economic Report of the President summarized the government's control problem diagrammatically.³ In figure 1, panel A, an expenditure program is shown as a downward-sloping line, E_0 , reflecting primarily the decline in unemployment benefits as real GNP increases. In combination with a given structure of tax rates (the line T_0), the surplus or deficit (S_0) is also drawn as a function of the level of GNP in the bottom portion of panel A. A fiscal action, in this case an increase in spending programs, is shown as a shift of

Keith M. Carlson is an assistant vice president at the Federal Reserve Bank of St. Louis. James C. Poletti provided research assistance.

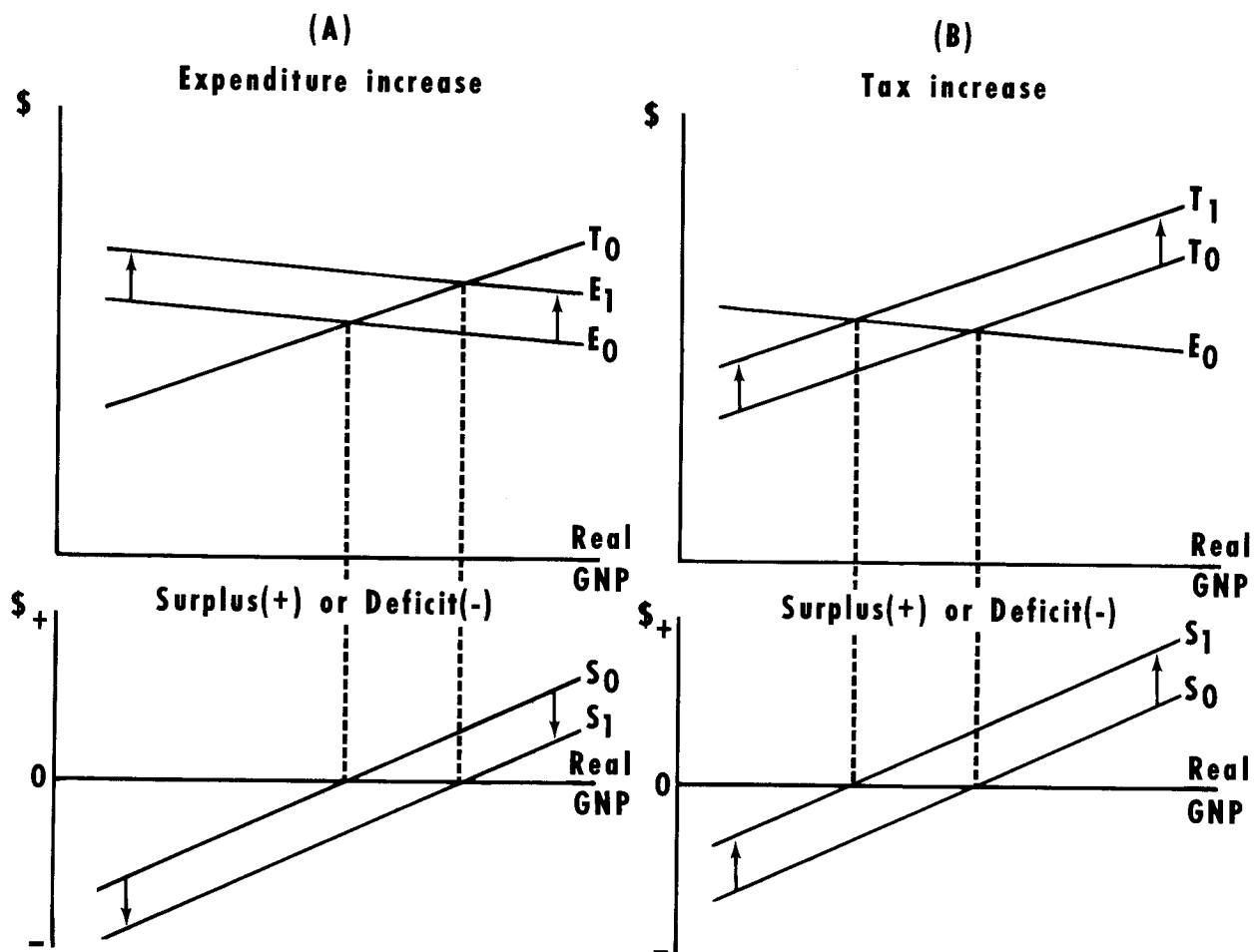
¹For discussion of the evolution of the Employment Act along with its updated version, The Full Employment and Balanced Growth Act of 1978, see Santoni (1986).

²From Public Law 304, quoted in Norton (1985), pp. 79–80.

³Council of Economic Advisers (1962), pp. 77–84. Using real GNP on the horizontal axis implies that the expenditure and tax lines are drawn for a given price level. To avoid complicating the analysis, price level problems are not considered explicitly here. For detailed discussion of such problems, see Carlson (1983).

Figure 1

An Illustration of Fiscal Actions



the expenditure line to E_1 , which also shifts the surplus/deficit line. But because the new level of expenditures is now greater for each level of GNP, the surplus is less (or the deficit is more) at each GNP level.

Similarly, the effects of a tax action are shown in panel B of figure 1. A given structure of tax rates is shown as an upward-sloping line, T_0 , indicating that taxes increase with the level of GNP. An increase in tax rates will shift the surplus/deficit line upward, to S_1 . This shift represents the effect of legislated or administered fiscal actions.

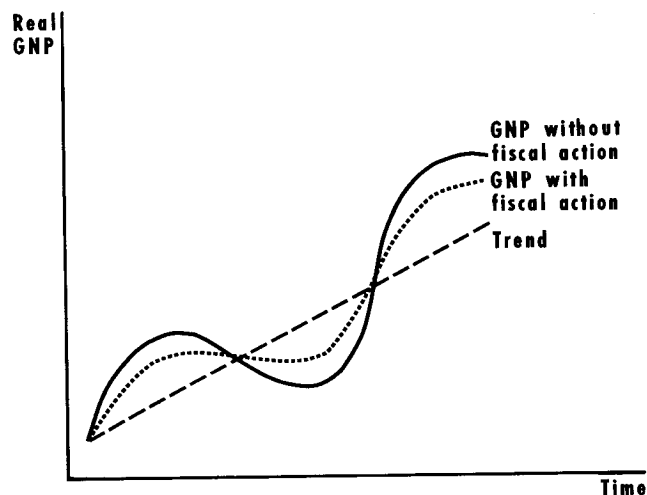
Defining Economic Stabilization

The second clarification concerns the meaning of the term "stabilizing the economy." While the wording of the Employment Act can serve as a guide, it is not

very specific. In particular, the word "maximum" is subject to a variety of interpretations. A working interpretation has evolved over the years, since one was never clearly delineated in the late 1940s and 1950s. A considerable amount of controversy revolves around the specific goals associated with economic stability.

In theory, the objective of fiscal policy can be defined quite clearly. If the economy is subject to fluctuations, fiscal policy should be used to dampen those fluctuations. To illustrate, see figure 2. The solid line summarizes a cyclical pattern for GNP around an upward trend. A policy of economic stabilization, as shown by the dashed line, dampens the fluctuations. Generally, this would be achieved by taking restrictive action when GNP is above trend and stimulative action when it is below. Doing this at the right time and in the right dosage is, of course, difficult in practice. None-

Figure 2
The Meaning of Economic Stabilization



theless, this concept does provide a framework for assessing the success or failure of past actions, which, in turn, might be useful as a guide to formulating future actions.

THE MEASUREMENT OF FISCAL ACTIONS

There has been continuing controversy over the proper role, if any, for fiscal policy in the U.S. economy since the Employment Act of 1946 was passed. Many issues remain unsettled. Accompanying the debate about the theory of fiscal policy have been significant changes in the way fiscal actions are measured.

Evolution of Budget Data

When the Employment Act of 1946 was passed, about the only data readily available on the federal budget were the figures released in the budget document itself. These figures were for fiscal years for the administrative budget and excluded the transactions of trust funds, for example, social security. The development of the national income accounts budget in the 1950s resulted in the availability of quarterly data. Later, the transactions of the trust funds were com-

bined with the administrative budget, producing the consolidated cash budget.⁵

Currently, the unified budget, which succeeded the consolidated cash budget, serves as the primary budget measure used by the government in its fiscal planning. The federal sector of the national income and product accounts, sometimes called the national income accounts budget, is considered a more useful measure for economic analysis, however (see insert).

Full-Employment Budget Concept

One of the most important innovations in measuring fiscal actions occurred in the 1960s when the full employment budget was developed as a part of the *Economic Report of the President*.⁶ The full-employment budget is not really a budget at all: it is an analytical measure that adjusts federal expenditures and receipts in the national income accounts to account for the feedback effects of economic activity. One of its main features is to draw the distinction between active and passive deficits (or surpluses). Active deficits (surpluses) result from policy actions, that is, they reflect legislated or administered changes in expenditures or tax rates. Passive deficits (surpluses) reflect the influence of economic activity on the deficit, given the spending programs and the tax structure in place. This distinction is shown in figure 3, which reproduces panel A in figure 1 except that the full-employment level of GNP is now a dashed vertical line. An active deficit (in this case, a smaller surplus) is shown as a movement from A to B. A movement from A to C can be described as a passive deficit (again a smaller surplus).

The full-employment budget was renamed the high-employment budget in the late 1960s and later changed to the cyclically adjusted budget in 1983.⁷ Despite these changes, its purpose is unchanged: to adjust actual expenditures and receipts for the influence of changing economic conditions.

Other Measures

In recent years, other measures of fiscal action have been introduced; most of them are refinements of existing measures. For example, with the recent growth in the importance of interest cost, and its role in eventually eradicating deficits, James Tobin has

⁴For an exhaustive survey of the theory of fiscal policy, see Brunner (1986).

⁵President's Commission on Budget Concepts (1967).

⁶Council of Economic Advisers (1962), and Carlson (1967).

⁷de Leeuw and Holloway (1983).

The Budget and Federal Sector of the National Income and Product Accounts

The federal budget summarizes the finances of the government and records transactions on a cash basis. The federal sector of the national income and product accounts (sometimes referred to as the NIA budget) is considered a more appropriate measure of budget's effect on economic activity because it is conceptually consistent with the national income and product accounts which measure current income and production. The NIA budget excludes financial transactions and measures taxes when the liability is incurred. Defense procurement is recorded when the goods are delivered to the government; work in progress is a part of private business inventories. The accompanying table shows the relationship of the budget to the NIA budget.¹

For further discussion, see Budget of the United States Government for Fiscal Year 1988, *Special Analysis B*.

Relationship of Budgets for Fiscal 1986 (billions of dollars)

Receipts

Total budget receipts	\$ 769.1
Government contributions for employee retirement	33.8
Other netting and grossing	12.3
Timing adjustments	0.8
Geographic exclusions	-1.4
Other	—

NIA receipts \$ 814.7

Expenditures

Total budget outlays	\$ 989.8
Lending and financial transactions	-12.5
Government contributions for employee retirement	33.8
Other netting and grossing	12.3
Defense timing adjustment	3.2
Bonuses on outer continental shelf land leases	2.0
Geographic exclusions	-5.4
Other	2.0

NIA expenditures \$1,025.4

developed the notion of primary surplus or deficit.⁸ This measure is simply the surplus or deficit minus interest payments to the public and Federal Reserve payments to the Treasury. This measure can be calculated on a cyclically adjusted basis as well.

Another measure receiving recent publicity has been developed by Robert Eisner.⁹ His measure, which can be derived for a variety of budget measures, is adjusted for inflation. This means adjusting the deficit for changes in the value of government debt outstanding due to inflation.

ECONOMIC PERFORMANCE AND FISCAL POLICY: AN OVERVIEW

While several fiscal policy measures have been developed over the years, the cyclically adjusted budget approach is used here to assess the direction of fiscal

actions in light of the Employment Act's objectives. This approach attempts to measure the active deficit directly; thus, it represents one measure of "discretionary" fiscal action. Several other variants of the cyclically adjusted budget also are examined.

To assess fiscal policy actions, one must discuss and analyze them in an economic context.¹⁰ The background for this assessment is shown in chart 1, which summarizes economic and budget data with reference to the ratio of GNP to its trend value.¹¹ The vertical

¹⁰For detailed summaries of fiscal policy, see Holmans (1962), Lewis (1962), Stein (1969), Eisner (1986) and Pechman (1987).

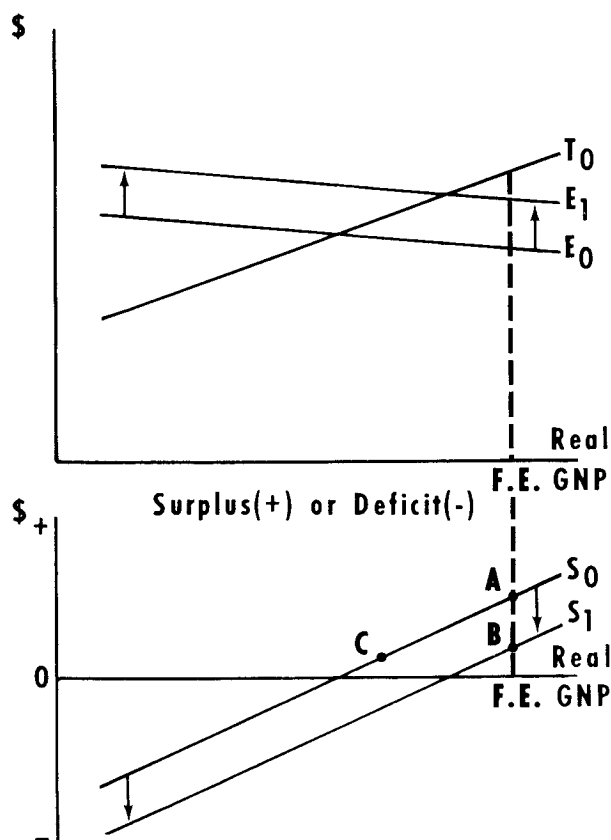
¹¹The trend value is calculated following procedures outlined in de Leeuw and Holloway (1983). Since the Department of Commerce does not attempt to cyclically adjust the price level, the ratio could be interpreted in terms of nominal GNP. That is,

$$\frac{\text{actual real GNP}}{\text{trend real GNP}} = \frac{\text{actual real GNP} \times P}{\text{trend real GNP} \times P} = \frac{\text{actual nominal GNP}}{\text{trend nominal GNP}}$$

⁸Tobin (1984).

⁹Eisner (1986).

Figure 3
Full-Employment Budget



lines represent periods when GNP was persistently above or below trend, or when it was moving along trend. The choice of periods using trend GNP as a point of reference follows the interpretation of figure 2 and differs from procedures followed by the National Bureau of Economic Research where reference points are based on whether economic activity is rising or falling.¹²

The top tier of chart 1 summarizes U.S. economic performance as measured by the ratio of GNP to its trend value from 1947 through 1986. U.S. economic performance in the late 1940s and early 1950s was

quite volatile, reflecting, in part, the influence of wars and their aftermath. During the second half of the 1950s and the early 1960s, economic performance fluctuated relatively close to trend. The second half of the 1960s again reflected wartime conditions. Finally, economic performance in the 1970s and 1980s showed considerable fluctuation around trend, even though there were no major wars.

The bottom tier of the chart summarizes fiscal actions as measured by the surplus or deficit in the cyclically adjusted budget. To adjust the level of the surplus or deficit for the size of the economy, we divide by the trend value of GNP in current dollars. The resulting measure is quite volatile on a quarterly basis.

This measure of fiscal action was well in surplus in the late 1940s. The sharp movement from surplus to deficit in the early 1950s followed by the movements back to surplus reflected the Korean War and its aftermath. During the mid-1950s, this budget measure stayed in surplus until 1958 before dipping temporarily into deficit; it bounced back into surplus in 1960.

The period from 1960 to 1968 was one of considerable volatility around a downward trend. Except for one quarter in 1963, this budget was in deficit, increasingly so toward the end of the period when defense spending accelerated during the Vietnam War. By late 1968, however, there was a sharp movement toward a smaller deficit, after a belated tax increase to finance the war. The smaller deficit persisted for the most part until 1975, reflecting mainly the phasing out of the Vietnam War.¹³

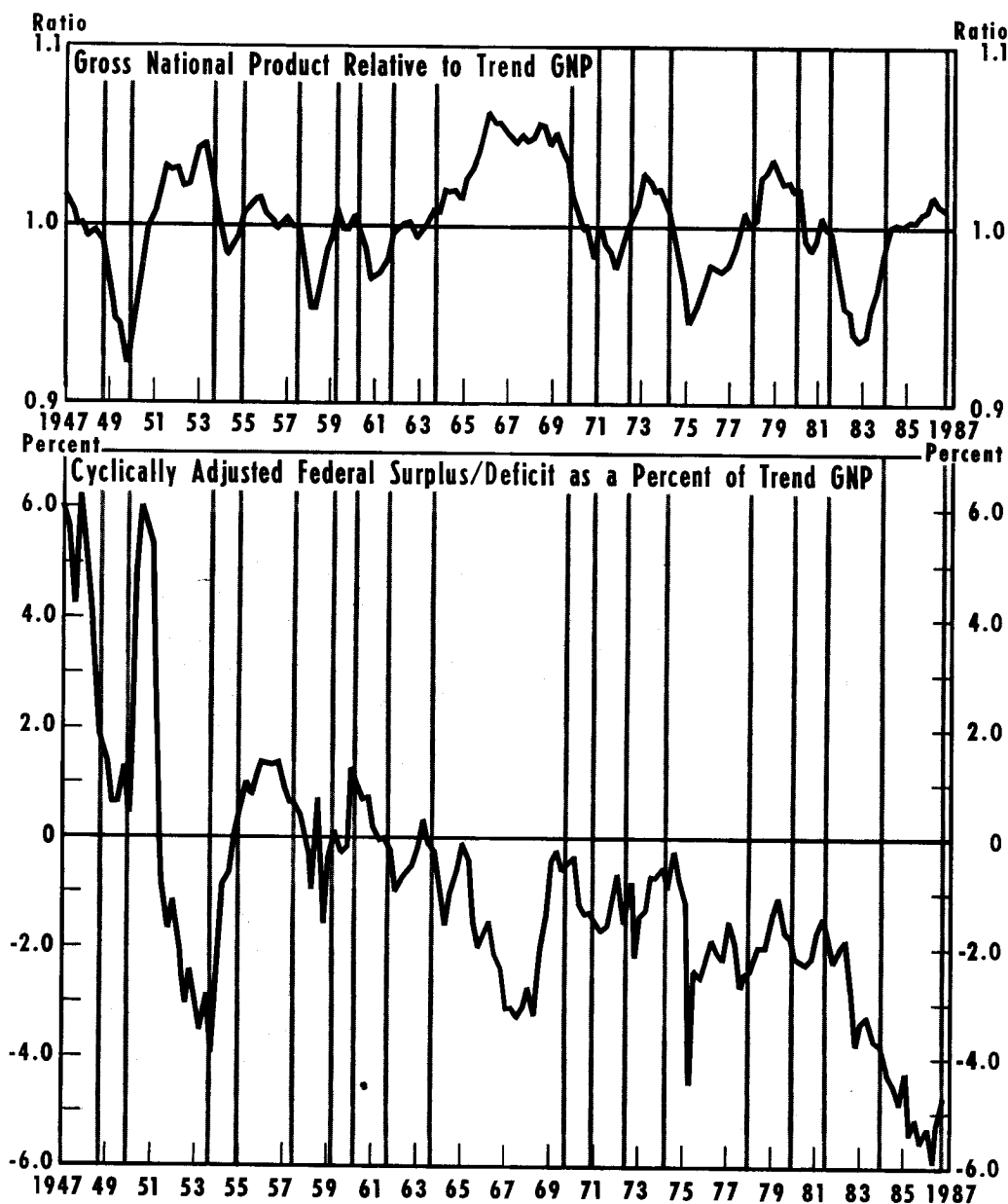
The second half of the 1970s showed a shift toward a larger deficit, highlighted by an anti-recession tax cut in 1975. Following this tax cut, the deficit remained at about 2 percent of trend GNP through 1981. After 1981, however, the deficit showed a sharp downward movement that generally persisted through 1986. This drop was associated with accelerated expenditure growth and the Economic Recovery Tax Act of 1981, which cut individual income taxes by 25 percent and accelerated depreciation allowances for corporations. Despite some rescinding of these provisions by the Tax Equity and Fiscal Responsibility Act of 1982, the cyclically adjusted deficit fell below 5 percent of trend GNP by 1985-86.

¹²Note that the focus is on real GNP movements, thus deemphasizing the problems of inflation. Generally, periods when GNP is above trend are also periods of inflation. The "stagflation" case is not addressed explicitly; the assumption is made that the Employment Act places priority on real economic performance during such times.

¹³For a review of the sources of change in the federal deficit, see Holloway and Wakefield (1985).

Chart 1

GNP and Federal Fiscal Actions Relative to Trend GNP



AN ANALYSIS OF FISCAL ACTIONS: 1947-86

To analyze whether fiscal policy has been conducted in a manner consistent with the Employment Act, the last 40 years was divided into 18 periods, as

shown in chart 1. In the presumed spirit of the Employment Act, assessments of whether "easier" or "tighter" fiscal actions were called for were made as follows: periods when GNP was persistently below trend were viewed as calling for easier fiscal actions; periods when GNP was above trend were judged to

call for tighter fiscal actions. A growth of GNP along trend suggests that fiscal actions were satisfactory.

The subperiods are summarized on the left side of tables 1–3; the “description” column in these tables summarizes the relation of GNP to trend during these periods. “Required policy” follows from our analysis above. In some cases, because GNP was coming off such a high level, the early stages of recession were sometimes lumped in with “expansion above trend” (see I/1951–IV/1953 and II/1959–II/1960). Two other recessions were not noted separately: 1969–70 and 1980; the 1969–70 recession appears mild in retrospect and the 1980 recession was so short, as was the ensuing recovery, that it was not treated separately. In some periods, where it is not obvious what the “required policy” was, such cases are labeled “unknown.”

Tax policy and expenditure policy are examined separately. The tax system is, in a sense, self-perpetuating. Once a tax structure is put in place, the economic system will generate a stream of tax receipts without further “discretionary action.” Expenditure policy, on the other hand, is not as automatic. For the most part, to implement new programs or continue existing ones, some congressional action is required. After examining the tax and expenditure policies separately, the two are combined to assess overall fiscal policy.

Federal Tax Policy

Table 1 summarizes tax policy over the 1947–86 period with the annual rate of change of cyclically adjusted receipts. This change is termed “restrictive” or “stimulative,” depending on whether its growth rate was larger or smaller than that of trend GNP in current dollars. Using cyclically adjusted receipts as a measure of discretionary action implies that they were moving as the policymakers wanted them to. For example, if such receipts were growing significantly faster than trend GNP, we assume that policymakers were content with that outcome.¹⁴

According to table 1, over the entire 40-year period, tax policy was restrictive in 12 of the 18 periods, although in some cases marginally so (as shown with

question marks in table 1). This apparently reflected the progressive nature of the tax system and the continuing increases in social security taxes, even with the multitude of tax actions legislated throughout the periods (see appendix).

To determine the tax policy response to economic conditions, we focus on those periods when GNP was persistently above or below trend. For the nine periods in which GNP was below trend — mainly recessions and recoveries — tax policy was appropriately stimulative only three times: II/1960–IV/1961, II/1974–I/1978 and III/1981–I/1984.

GNP was persistently above trend in only four periods, two of these during wartime. The table shows that tax policy was restrictive in three of the four cases. The two wartime periods however, require special mention. During the Korean War, corporate, individual and excise taxes were raised very quickly after the outbreak of hostilities. As a result, most of the revenue effect occurred in the IV/1948–I/1951 period while the economy was still recovering from the 1948–49 recession. In the I/1951–IV/1953 period, on the other hand, revenues declined in the latter part of the period because some wartime taxes were allowed to expire.

The Vietnam War was handled much differently. In the early part of IV/1963–IV/1969, most tax actions were stimulative rather than restrictive. Not until 1968 and 1969, long after the war had accelerated, were taxes increased. Because of the 10 percent surcharge on corporate and individual income taxes in 1968, tax policy during the IV/1963–IV/1969 period is shown as restrictive, even though it was stimulative during the early part of this period.

In summary, tax policy often has not been conducted in a manner consistent with the Employment Act. Tax actions that were taken were usually overwhelmed by other considerations, namely, financing wars and the social security system. The record has improved, however, in the 1970s and 1980s. Major tax cuts were implemented during the 1973–75 recession and before the 1981–82 recession; during the 1972–74 and 1978–80 periods of excess demand, taxes increased faster than GNP.

Federal Expenditure Policy

Table 2 summarizes federal expenditure policy for the same periods as described in table 1. The measure of expenditure policy is total cyclically adjusted expenditures; the reason underlying the use of this as a

¹⁴The Commerce Department also calculates another measure, which purports to be a measure of discretionary tax action. It is derived from total cyclically adjusted receipts by subtracting an estimate of the automatic effect of inflation on such receipts (See Holloway (1984)). The Commerce Department calls this residual “receipts change due to discretionary and other factors.” Use of this alternative measure did not alter the conclusions.

Table 1
Federal Tax Actions

Period	No. of quarters	Description	Required policy	Rate of change of cyclically adjusted receipts	Rate of change of trend GNP in current dollars	Tax policy direction	Corre- policy direction?
I/47-IV/48	7	Expansion along trend	Unknown	0.5%	11.6%	Stimulative	—
IV/48-I/51	9	Recession and recovery	Stimulative	19.5	7.8	Restrictive	No
I/51-IV/53	11	Expansion above trend including early recession	Restrictive to Unknown	-0.8	4.5	Stimulative	No
IV/53-I/55	5	Recession and recovery	Stimulative	7.0	6.4	Restrictive?	No
I/55-III/57	10	Expansion along trend	Unknown	7.5	6.3	Restrictive?	—
III/57-II/59	7	Recession and recovery	Stimulative	5.4	4.7	Restrictive?	No
II/59-II/60	4	Expansion along trend including early recession	Unknown to Stimulative	7.4	4.8	Restrictive	No
II/60-IV/61	6	Mild recession and recovery	Stimulative	3.9	4.5	Stimulative?	—
IV/61-IV/63	8	Expansion along trend	Unknown	6.0	5.6	Restrictive?	—
IV/63-IV/69	24	Expansion above trend	Restrictive	8.9	7.7	Restrictive	Yes
IV/69-I/71	5	Expansion along trend	Unknown	2.2	9.5	Stimulative	—
I/71-III/72	6	Expansion below trend	Stimulative	10.7	8.9	Restrictive	No
III/72-II/74	7	Expansion above trend	Restrictive	13.1	10.3	Restrictive	Yes
II/74-I/78	15	Recession and recovery	Stimulative	9.5	10.4	Stimulative?	Yes
I/78-I/80	8	Expansion above trend	Restrictive	13.6	11.5	Restrictive	Yes
I/80-III/81	6	Short recession and recovery followed by expansion along trend	Stimulative to Unknown	16.4	12.3	Restrictive	No
III/81-I/84	10	Recession and recovery	Stimulative	3.8	7.1	Stimulative	Yes
I/84-IV/86	11	Expansion along trend	Unknown	5.7	5.1	Restrictive?	—

Table 2

Federal Expenditure Actions

Period	No. of quarters	Description	Required policy	Rate of change of cyclically adjusted expenditures	Rate of change of trend GNP in current dollars	Expenditure policy direction	Corre policy direction
I/47-IV/48	7	Expansion along trend	Unknown	17.1%	11.6%	Stimulative	—
IV/48-I/51	9	Recession and recovery	Stimulative	9.3	7.8	Stimulative	—
I/51-IV/53	11	Expansion above trend including early recession	Restrictive to Unknown	19.1	4.5	Stimulative	—
IV/53-I/55	5	Recession and recovery	Stimulative	-10.2	6.4	Restrictive?	No
I/55-III/57	10	Expansion along trend	Unknown	7.1	6.3	Stimulative?	—
III/57-II/59	7	Recession and recovery	Stimulative	7.0	4.7	Stimulative	Yes
II/59-II/60	4	Expansion along trend including early recession	Unknown to Stimulative	2.9	4.8	Restrictive	No
II/60-IV/61	6	Mild recession and recovery	Stimulative	8.1	4.5	Stimulative	Yes
IV/61-IV/63	8	Expansion along trend	Unknown	6.2	5.6	Stimulative?	—
IV/63-IV/69	24	Expansion above trend	Restrictive	9.1	7.7	Stimulative	No
IV/69-I/71	5	Expansion along trend	Unknown	7.0	9.5	Restrictive	—
I/71-III/72	6	Expansion below trend	Stimulative	7.8	8.9	Restrictive	No
III/72-II/74	7	Expansion above trend	Restrictive	13.6	10.3	Stimulative	No
II/74-I/78	15	Recession and recovery	Stimulative	11.6	10.4	Stimulative	Yes
I/78-I/80	8	Expansion above trend	Restrictive	12.7	11.5	Stimulative	No
I/80-III/81	6	Short recession and recovery followed by expansion along trend	Stimulative to Unknown	14.8	12.3	Stimulative	Yes
III/81-I/84	10	Recession and recovery	Stimulative	7.9	7.1	Stimulative?	Yes
I/84-IV/86	11	Expansion along trend	Unknown	7.0	5.1	Stimulative	—

discretionary variable parallels that for cyclically adjusted receipts.¹⁵

To determine whether expenditures were stimulative or restrictive, we compare them with trend GNP. Like cyclically adjusted receipts in table 1, we compare total expenditures with trend GNP in current dollars. According to this measure, expenditure actions were stimulative in fourteen of the eighteen periods. The overall 40-year period provides a mixed assessment of expenditure policy. There were nine periods when economic conditions called for stimulative policy. Expenditure policy was stimulative in six of those periods. As noted earlier, total expenditures grew faster than trend GNP throughout the entire period. Thus, it is not surprising that expenditure policy just happens to have moved in the appropriate direction more often than not when economic conditions called for policy in a stimulative direction. To refer to such results as an example of success perhaps overrates them.

There were four periods of high demand, when a restrictive policy would have been appropriate; in each case, however, expenditure policy was stimulative. Two of these periods encompassed the buildup for the Korean and Vietnam wars.

On net, like tax policy, federal expenditure policy has not been consistent generally with the Employment Act. During periods of recession and recovery, it was stimulative only two-thirds of the time. During periods of excess demand, it was always stimulative; two of these periods, however, were associated with wars.

Total Fiscal Policy

As a final step in assessing whether fiscal policy has been conducted consistent with the spirit of the Employment Act, we examine measures of total fiscal policy. An overall measure is derived from tables 1 and 2 and summarized in table 3. It is the dollar change in expenditures minus the dollar change in receipts, converted to an annual rate, and divided by the average of trend GNP (in current dollars) over the relevant subperiod. If this ratio was positive, policy on net was stimulative over the period. If it was negative, policy was restrictive.

In only four of the 12 nonneutral cases did the measure of total fiscal policy move in the right direction. These were recession and recovery periods after 1955. When GNP was above trend, the quantitative measures indicated stimulus in each case, although the size of the net stimulus usually was very small. Analysis of this summary measure suggests that fiscal actions generally have moved in a direction opposite to that which would be consistent with the Employment Act.

SUMMARY

The Employment Act of 1946 designated a role for the federal government in stabilizing the level of economic activity. Economists, in general, interpret this to mean that monetary and fiscal actions should be used for that purpose. This article summarizes the general movement of fiscal policy since the 1946 act.

After reviewing the meaning and measurement of fiscal policy, fiscal actions were summarized over the 1947-86 period. This was done by dividing the 40-year period into subperiods depending on the relation of GNP to its trend value. Various measures of fiscal action then were examined to determine if such actions were consistent with the spirit of the Employment Act, focusing on the direction of fiscal response to economic conditions, not on the impact of fiscal actions on the economy.

Although various measures of fiscal actions occasionally offered different conclusions, some tentative general conclusions emerged. Fiscal actions during periods of recession and recovery were usually stimulative, although this assertion is somewhat sensitive to the measure of fiscal action chosen. During periods of high demand and inflation, fiscal actions tended to be inappropriate mainly because these were wartime periods.

Overall, it is impossible to determine accurately whether the Employment Act has succeeded or failed in stabilizing the economy. To do so requires an assessment of other policies, and perhaps the inherent stability of private actions, as contributors to the economic stability and progress of the United States over the past 40 years.

REFERENCES

- Brunner, Karl. "Fiscal Policy in Macro Theory: A Survey and Evaluation," in R. W. Hafer, ed., *The Monetary versus Fiscal Policy Debate* (Rowman and Allenheld, 1986), pp. 33-116.

¹⁵The Commerce Department also calculates a direct measure of discretionary expenditure. Reflecting the effect of cost-of-living escalator clauses, it is obtained by subtracting an automatic inflation effect on federal programs from cyclically adjusted expenditures. Use of this measure did not alter the overall conclusions about expenditure policy.

Period	No. of quarters	Description	Required policy	Annualized change of cyclically adjusted expenditures	Annualized change of cyclically adjusted receipts	Change in expenditure minus change in receipts ÷ trend GNP in current dollars	Policy direction	Correct policy direction
I/47-IV/48	7	Expansion along trend	Unknown	\$ 5.4	\$ 0.2	2.1%	Stimulative	-
IV/48-I/51	9	Recession and recovery	Stimulative	3.9	9.6	-2.1	Restrictive	N
I/51-IV/53	11	Expansion above trend including early recession	Restrictive to Unknown	10.8	-0.5	3.2	Stimulative	N
IV/53-I/55	5	Recession and recovery	Stimulative	-7.8	4.5	-3.3	Restrictive	N
I/55-III/57	10	Expansion along trend	Unknown	5.1	5.4	-0.1	Restrictive?	-
III/57-II/59	7	Recession and recovery	Stimulative	5.8	4.6	0.2	Stimulative	Y
II/59-II/60	4	Expansion along trend including early recession	Unknown to Stimulative	2.6	6.8	-0.8	Restrictive	N
II/60-IV/61	6	Mild recession and recovery	Stimulative	7.7	3.9	0.7	Stimulative	Y
IV/61-IV/63	8	Expansion along trend	Unknown	6.7	6.5	0.0	Stimulative?	-
IV/63-IV/69	24	Expansion above trend	Restrictive	13.5	13.0	0.1	Stimulative	N
IV/69-I/71	5	Expansion along trend	Unknown	14.1	4.3	1.0	Stimulative	-
I/71-III/72	6	Expansion below trend	Stimulative	17.1	22.0	-0.4	Restrictive	N
III/72-II/74	7	Expansion above trend	Restrictive	34.5	32.1	0.2	Stimulative	N
II/74-I/78	15	Recession and recovery	Stimulative	41.0	31.2	0.6	Stimulative	Y
I/78-I/80	8	Expansion above trend	Restrictive	61.9	59.1	0.1	Stimulative	N
I/80-III/81	6	Short recession and recovery followed by expansion along trend	Stimulative to Unknown	89.3	89.2	0.0	Unknown	-
III/81-I/84	10	Recession and recovery	Stimulative	60.1	25.8	1.0	Stimulative	Y
I/84-IV/86	11	Expansion along trend	Unknown	64.1	43.1	0.5	Stimulative	-

- Carlson, Keith M. "Estimates of the High-Employment Budget: 1947-67," this *Review* (June 1967), pp. 6-14.
- _____. "The Critical Role of Economic Assumptions in the Evaluation of Federal Budget Programs," this *Review* (October 1983), pp. 5-14.
- Council of Economic Advisers. *Economic Report of the President* (U.S. Government Printing Office, 1962).
- de Leeuw, Frank, and Thomas M. Holloway. "Cyclical Adjustment of the Federal Budget and Federal Debt," *Survey of Current Business* (December 1983), pp. 25-40.
- Eisner, Robert. *How Real is the Federal Deficit?* (The Free Press, 1986).
- Holmans, A. E. *United States Fiscal Policy: 1945-59* (Oxford University Press, 1962).
- Holloway, Thomas M. "The Economy and the Federal Budget: Guides to the Automatic Effects," *Survey of Current Business* (July 1984), pp. 102-05.
- Holloway, Thomas M., and Joseph C. Wakefield. "Sources of Change in the Federal Government Deficit, 1970-86," *Survey of Current Business* (May 1985), pp. 25-32.
- Lewis, Wilfred Jr. *Federal Fiscal Policy in the Postwar Recessions* (The Brookings Institution, 1962).
- Norton, Hugh S. *The Quest for Economic Stability: Roosevelt to Reagan* (University of South Carolina Press, 1985).
- Pechman, Joseph A. *Federal Tax Policy*, 5th ed. (The Brookings Institution, 1987).
- President's Commission on Budget Concepts. *Staff Papers and Other Materials Revised by the President's Commission* (GPO, October 1967).
- Santoni, G. J. "The Employment Act of 1946: Some History Notes," this *Review* (November 1986), pp. 5-16.
- Stein, Herbert. *The Fiscal Revolution* (University of Chicago Press, 1969).
- Tobin, James. "Budget Deficits, Federal Debt, and Inflation," in Albert T. Sommers, ed., *Reconstructing the Federal Budget* (Praeger Publishers, 1984), pp. 130-49.